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10/588,428	08/04/2006	Hiroshi Nagai	SHOBA6.001APC	9228
20995 7590 07/05/2011 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614				
EXAMINER PERREIRA, MELISSA JEAN				
ART UNIT		PAPER NUMBER		
1618				
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07/05/2011		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/588,428

**Applicant(s)**

NAGAI ET AL.

**Examiner**

MELISSA PERREIRA

**Art Unit**

1618

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 January 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 5-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/14/11

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/14/11 has been entered.

### ***Claims and Previous Objections/Rejections Status***

2. Claims 1,2 and 5-7 are pending in the application.
3. The rejection of claims 1,2 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeyuan et al. (*J. Agric. Food Chem.* **1998**, *46*, 3875-3878) in view of Suzuki et al. (*J. Agric. Food Chem.* **2000**, *48*, 5649-5653) and in further view of Iwasaki et al. (US 7,014,876B2) is withdrawn due to the amendment to the claims.

### ***Declaration/Affidavit***

4. The declaration under 37 CFR 1.132 filed 1/14/11 is sufficient to overcome the rejection of claims 1,2 and 5-7 based upon the fact that the previous rejection relies on the use of black tea (fermented tea) extracts while the newly amended claims are drawn to the use of green teas and the declaration states that the comparison Test beverage 2- Yabukita green tea extract doesn't provide any O-methylated catechins of the instant claims.

***New Grounds of Rejection Necessitated by the Amendment***

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1,2 and 5-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The recitation of "unfermented tea leaves" is not supported in the specification and is not commensurate in scope with the instant claims. The specification recites that the, "the O-methylated catechin is derived from one selected from the group consisting of "Benifuuki", "Benifuji", "Benihomare", "Yaeho", etc. which include both fermented and unfermented teas as evidenced by the reference Shirahata et al. (Animal Cell Technology: basic & applied aspects: proceedings of the Thirteenth Annual Meeting of the Japanese Association for Animal Cell Technology (JAACT), Fukuoka-Karatsu, Springer, November 16-21, 2000, Vol 12.); wherein Benihomare and two of its offspring, Benifuuki and Benifuji contained as much as 1% of EGCG3"Me in their green teas and slightly less in their semi-fermented teas. Thus, semi-fermented teas provide EGCG3"Me (O-methyl catechin) and an increase in

the amount of tea leaves used in the extraction process will provide for an increase in the amount of O-methyl catechins isolated for an extract/beverage.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1,2 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeyuan et al. (*J. Agric. Food Chem.* **1998**, *46*, 3875-3878) in view of Suzuki et al. (*J. Agric. Food Chem.* **2000**, *48*, 5649-5653) and Shirahata et al. (Animal Cell Technology: basic & applied aspects: proceedings of the Thirteenth Annual Meeting of the Japanese Association for Animal Cell Technology (JAACT), Fukuoka-Karatsu, Springer, November 16-21, 2000, Vol 12) and in further view of Iwasaki et al. (US 7,014,876B2).

9. Zeyuan et al. (*J. Agric. Food Chem.* **1998**, *46*, 3875-3878) discloses the method of reducing and examining blood triglyceride levels in a subject via the administration of black tea (fermented) and green tea (unfermented) extracts/functional beverages (abstract; p3876, left column, first full paragraph; p3876, results; p3876, discussion; p3877, left column). The green tea (unfermented) extracts/functional beverages had a higher ability to reduce blood glucose and blood triglycerides than that of black tea (abstract). The green tea extract, containing catechins, were prepared by boiling green

tea for 5 min and subsequently filtering (p3876, Tea for Experiment and Sample Preparation).

10. Zeyuan et al. does not disclose the O-methyl catechins of the instant claims, such as epigallocatechin-3-O-(3-O-methyl) gallate, etc. derived from the green tea leaves of the instant claims, such as Benihomare, etc.

11. Suzuki et al. (*J. Agric. Food Chem.* **2000**, 48, 5649-5653) discloses the extraction of O-methylated catechin derivatives, such as (-)- epigallocatechin-3-O-(3-O-methyl) gallate (EGCG3"Me) from the tea leaves of Benihomare cultivar (green unfermented tea), etc. (p5649, Introduction, paragraph 1). The green tea extracts of the disclosure were prepared with hot water for 30 min and are then subsequently filtered (p5650, Materials and Animals). The O-methylated catechin derivative EGCG3"Me and (-)- epigallocatechin-3-O-gallate (EGCG) extracts show analogous inhibition of type I and IV allergy upon oral administered to mice (abstract; p5649, Introduction paragraphs 1 and 2; p5651, paragraphs 2 and 3).

12. Shirahata et al. (*Animal Cell Technology: basic & applied aspects: proceedings of the Thirteenth Annual Meeting of the Japanese Association for Animal Cell Technology (JAACT)*, Fukuoka-Karatsu, Springer, November 16-21, 2000, Vol 12.) discloses that Benihomare and two of its offspring, Benifuuki and Benifuji contained as much as 1% of EGCG3"Me in their green teas and slightly less in their semi-fermented teas. A higher concentration of EGCG3"Me was found on or after the second crop in Benihomare and Benifuji. Furthermore, EGCG3"Me was not detected in black tea (fermented tea) manufactured from Benihomare and Benifuji.

13. Zeyuan et al. teaches that the constituents of green tea extracts comprising catechins reduce blood triglyceride levels and therefore at the time of the invention it would have been obvious to one ordinarily skilled in the art that the O-methylated catechins, such as EGCG3"Me isolated in the Benihomare cultivar, Benifuji cultivar, etc. green tea extracts of Suzuki et al. are necessarily included in the tea extracts/functional beverages for the method of reducing blood triglyceride levels of Zeyuan et al. as Shirahata et al. teaches that Benihomare, Benifuuki and Benifuji contained as much as 1% of EGCG3"Me in their green teas.

14. Also, Suzuki et al. and Zeyuan et al. have identical extraction processes for the green tea extracts/functional beverages and therefore it would have been obvious to one skilled in the art that the green tea extracts/functional beverages of Zeyuan et al. comprise O-methylated catechin derivatives as taught by Suzuki et al.

15. Suzuki et al. teaches that EGCG and EGCG3"Me have analogous properties and therefore, it is obvious to those skilled in the art to make known substitutions on compounds that are similar in structure and function to observe the effects on the function of such compounds and to use the observations/data to further manipulate a compound to generate the desired effect, such as reducing blood triglyceride levels.

16. Zeyuan et al. does not disclose the O-methyl catechin concentration of the instant claims.

17. Iwasaki et al. (US 7,014,876B2) discloses a healthy drink containing catechins which are extracted from tea, such as green, Oolong tea, black tea (column 2, lines 32-

53; column 8, lines 41+). The healthy drink is capable of maximizing the transfer amount of catechins to the blood upon drinking, thereby heightening the utilization degree of them in the body (column 1, lines 66+). The concentrated tea extracts are prepared by treating tea leaves with hot water (column 8, lines 41+). The catechins found in green tea are used in the healthy drink in an amount from 0.092 to 0.5 g per 100 ml (column 2, lines 9-13; column 3, lines 16-20).

18. The disclosures of Suzuki et al., Zeyuan et al. and Iwasaki et al. are drawn to the same utility, such as extracts of green tea containing catechins prepared via adding hot water to green tea leaves and therefore at the time of the invention it would have been obvious to one ordinarily skilled in the art to use the catechin extract concentration of Iwasaki et al. for the method of reducing blood triglyceride levels of Zeyuan et al. as the green tea extract will advantageously maximize the transfer amount of catechins to the blood upon drinking, thereby heightening the utilization degree of them in the body and improve the function of the liver (Iwasaki et al.) while reducing blood triglyceride levels. In regards to the concentration of catechins found in the green tea extract, it is obvious to vary and/or optimize the amount of green tea extract provided in the composition, according to the guidance provided by Iwasaki et al., to provide a composition having the desired properties, such as to advantageously improve the function of the liver while reducing blood triglyceride levels. It is noted that "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).



***Response to Arguments***

19. Applicant's arguments filed 1/14/11 have been fully considered but they are not persuasive.

20. Applicant asserts that the Examiner contends Suzuki discloses that O-methylated catechin derivatives can be extracted from Benihomare cultivar (black tea). Finally, the Examiner alleges that Iwasaki discloses "that catechins found in black tea are used in the healthy drink in an amount from 0.092 to 0.5 g per 100 ml and thus is it predictable to provide for a black tea containing catechins in an amount from 0.092 to 0.5g per 100 ml in a healthy drink." Therefore, the Examiner contends that it would be obvious to one of skill in the art to begin with the tea disclosed in Zeyuan, substitute the Benihomare cultivar tea disclosed in Suzuki, and modify the amount of catechins disclosed in Iwasaki from 0.092 to 0.5g per 100 ml of catechins to the claimed 5 mg to 30 mg per 100 ml of the methylated catechins as recited in Claims 1. The Applicants respectfully traverse. First, it is important to note than none of the cited references disclose that methylated catechins have any effect on BTG levels. The Examiner alleges that, "although the amount of catechins in the extract of Zeyuan et al. does not correlate with BTG reducing effects it would have been obvious to one skilled in the art that the black tea extract/functional beverage of Zeyuan et al. and its constituents, such as the catechins are used for the method of reducing triglyceride levels in an individual." While it may be obvious that some component or combination of components in the beverage disclosed in Zeyuan has an effect on BTG levels, Zeyuan does not disclose higher

levels of methylated catechins in particular have any effect on BTG levels. Indeed, the Examiner has admitted that "the amount of catechins in the extract of Zeyuan et al. does not correlate with BTG reducing effects." As addressed in Applicants' Response to Office Action dated August 10, 2010, and admitted by the Examiner, Zeyuan does not disclose any correlation between methylated catechins and BTG reducing effects. Furthermore, Suzuki and Iwasaki do not disclose that any tea has any effect on BTG levels. Moreover, neither of the secondary references would suggest that methylated catechins have any BTG-reducing effects. In fact, the Suzuki reference discloses only black (i.e. fermented) tea, which has only insignificant quantities of methylated catechins. Moreover, the Examiner's allegation concerning the catechins disclosed in Iwasaki relate only to those catechins found in black tea used in the healthy drink. As discussed above, fermented teas, such as black teas, are known to contain only insignificant quantities of methylated catechins. Accordingly, none of the cited references disclose or suggest anything about the use of unfermented teas containing the recited levels of methylated catechins.

21. The previous rejection has been withdrawn and new grounds of rejection applied due to the amendment to the instant claims.

22. The reference of Suzuki discloses the extraction of O-methylated catechin derivatives, such as (-)- epigallocatechin-3-O-(3-O-methyl) gallate (EGCG3"Me) from the tea leaves of Benihomare cultivar while Shirahata et al. teaches that only the green tea Benihomare cultivar and two of its offspring, Benifuuki and Benifuji contained as much as 1% of EGCG3"Me while EGCG3"Me was not detected in black tea (fermented

tea) manufactured from Benihomare and Benifuji. Thus, the O-methylated catechin derivatives, such as (-)- epigallocatechin-3-O-(3-O-methyl) gallate (EGCG3"Me) from the tea leaves of Benihomare cultivar necessarily are from the green unfermented tea as the black tea manufactured from Benihomare does not contain O-methylated catechins.

23. The instant claims are not drawn to the method of reducing triglyceride levels in an individual by administering only the O-methylated catechins of the instant claims but are drawn to the method of reducing triglyceride levels in an individual by administering a functional beverage which may comprise other constituents provided in the extract of the teas.

24. The reference of Zeyuan et al. was not used to teach of O-methyl catechins but was used to teach of a green tea extract/functional beverage wherein all of the constituents of the green tea extracts, comprising catechins, reduce blood triglyceride levels.

25. Although the amount of catechins in the extract of Zeyuan et al. does not correlate with BTG reducing effects it would have been obvious to one skilled in the art that the green tea extract/functional beverage of Zeyuan et al. and all of its constituents provided in the green tea extract are used for the method of reducing triglyceride levels in an individual.

26. The reference of Suzuki et al. teaches that O-methylated catechin derivatives, such as (-)- epigallocatechin-3-O-(3-O-methyl) gallate (EGCG3"Me) are extracted from the tea leaves of Benihomare cultivar (green tea). Therefore, it would have been

obvious to one skilled in the art that the EGCG3<sup>Me</sup> of the green tea extract of Suzuki et al. is a constituent of the green tea extracts/functional beverage of Zeyuan et al. for the method of reducing blood triglyceride levels.

27. Applicant asserts that the cited references do not disclose a "functional beverage compris[ing] 5 mg to 30 mg/100 ml of at least one catechin selected from the group consisting of epigallocatechin-3-O- (3-O-methyl) gallate, epicatechin-3-O-(3-O-methyl) gallate, epigallocatechin-3-O-(4-O-methyl) gallate, galliccatechin-3-O-(3-O-methyl) gallate, catechin-3-O-(3-O-methyl) gallate, catechin-3-O- (4-O-methyl) gallate, galliccatechin-3-O-(4-O-methyl) gallate," as recited in Claim 1. The Examiner contends that Iwasaki discloses catechins in a healthy drink in an amount from 0.092 to 0.5g per 100 ml and, thus, it is obvious to vary and/or optimize the amount of a compound provided in the composition according to the guidance provided by the reference to provide a composition with the desired properties. However, Iwasaki discloses "non-epi-catechins such as catechin, galliccatechin, catechin gallate and galliccatechin gallate and epi-catechins such as epicatechin, epigallocatechin, epicatechin gallate and epigallocatechin gallate." Iwasaki does not disclose the use of the methylated catechins recited in Claim 1 in any quantity. Furthermore, nothing in the cited art provides any indication that any level of methylated catechins achieves a BTG-lowering effect. It is well-recognized that "a particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation." M.P.E.P. § 2144.05 II.B. As discussed, there

is nothing in Iwasaki or any other prior art reference that suggests that O-methylated catechins are responsible for the BTG-reducing effect. Therefore, discovering the "optimum or workable range" of O-methylated catechins cannot be "characterized as routine experimentation." See *Id.* Furthermore, Zeyuan and Suzuki also do not disclose a functional beverage comprising "5 mg to 30 mg/100 ml" of the recited methylated catechins.

28. The instant claims do not recite reducing BTG with O-methylated catechins but recite reducing triglyceride levels via a functional beverage wherein the functional beverage includes other constituents provided by the extraction of the tea leaves (see instant claim 2).

29. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

30. The reference of Iwasaki et al. was not used to teach of O-methylated catechins for reducing BTG levels by consuming a beverage containing 5 mg to 30 mg/100 mL of but was used to teach that catechins found in green tea are used in the healthy drink in an amount from 0.092 to 0.5 g per 100 ml. The healthy drink is capable of maximizing the transfer amount of catechins to the blood upon drinking, thereby heightening the utilization degree of them in the body. Therefore, it is predictable to provide for a green

tea healthy drink containing catechins in an amount from 0.092 to 0.5 g per 100 ml, such as the functional beverage/extract of Zeyuan et al.

31. The reference of Zeyuan and Suzuki were not used to disclose a functional beverage comprising "5 mg to 30 mg/100 ml" of the recited methylated catechins.

32. The reference of Zeyuan et al. was used to teach of a green tea extract/functional beverage wherein all of the constituents of the green tea extracts, comprising catechins, reduce blood triglyceride levels.

33. The reference of Suzuki et al. was used to teach that O-methylated catechin derivatives, such as (-)- epigallocatechin-3-O-(3-O-methyl) gallate (EGCG3"Me) are extracted from the tea leaves of Benihomare cultivar (green tea). Therefore, it would have been obvious to one skilled in the art that the EGCG3"Me of the green tea extract of Suzuki et al. is a constituent of the green tea extracts/functional beverage of Zeyuan et al. for the method of reducing blood triglyceride levels.

34. Zeyuan et al. teaches that the constituents of green tea extracts comprising catechins reduce blood triglyceride levels and therefore at the time of the invention it would have been obvious to one ordinarily skilled in the art that the O-methylated catechins, such as EGCG3"Me isolated in the green tea extracts of Suzuki et al. from Benihomare cultivar, Benifuji cultivar, etc. are necessarily included in the tea extracts/functional beverages for the method of reducing blood triglyceride levels of Zeyuan et al. as Shirahata et al. teaches that Benihomare, Benifuuki and Benifuji contained as much as 1% of EGCG3"Me in their green teas.

35. Also, Suzuki et al. and Zeyuan et al. have identical extraction processes for the green tea extracts/functional beverages and therefore it would have been obvious to one skilled in the art that the green tea extracts/functional beverage of Zeyuan et al. may comprise O-methylated catechin derivatives as taught by Suzuki et al.

36. Suzuki et al. teaches that EGCG and EGCG3"Me have analogous properties and therefore, it is obvious to those skilled in the art to make known substitutions on compounds that are similar in structure and function to observe the effects on the function of such compounds and to use the observations/data to further manipulate a compound to generate the desired effect, such as reducing blood triglyceride levels.

37. Applicant asserts that the cited references do not disclose "wherein said catechins are extracted from unfermented tea leaves of at least one selected from the group consisting of Benifuuki, Benifuji, Benihomare, Yaeho, Yutakamidori, Okumusashi, Seishin-taipan, Seishin-oolong, Ohba-oolong, Benibana, Benihikari, Yamakai, Yamamidori, Karabeni, Koushun, Souhuu, Okumidori and mixtures thereof" as recited in Claim 1. The Examiner contends Suzuki discloses that O-methylated catechin derivatives can be extracted from Benihomare cultivar (black tea). Id. However, amended Claim 1 recites that the tea must be unfermented, whereas the "Benihomare cultivar" of Suzuki is a type of black tea that is deeply fermented. As discussed above, such fermented teas have insignificant quantities of the recited methylated catechins. The unfermented tea leaves recited in Claim 1, including "Benihomare," contain much greater quantities of O-methylated catechins such as EGCG3"Me than other varieties of tea. Id. at Table 3. Additionally, as demonstrated in the applicants' Rule 132

Declaration, the O-methylated catechins such as EGCG3"Me contained in the recited types of unfermented tea provide a much greater BTG-reducing effect than other catechins disclosed in the cited references. Thus, not only do none of the references disclose a functional beverage comprising "5 mg to 30 mg/100 ml" of the recited methylated catechins, none of these references provide any suggestion to do so.

38. The previous rejection has been withdrawn and new grounds of rejection applied to address the unfermented tea in the amendment of the instant claims.

39. The reference of Zeyuan et al. was used to teach of a green tea extract/functional beverage wherein all of the constituents of the green tea extracts, comprising catechins, reduce blood triglyceride levels.

40. The reference of Suzuki discloses the extraction of O-methylated catechin derivatives, such as (-)- epigallocatechin-3-O-(3-O-methyl) gallate (EGCG3"Me) from the tea leaves of Benihomare cultivar while Shirahata et al. teaches that only the green tea Benihomare cultivar and two of its offspring, Benifuuki and Benifuji contained as much as 1% of EGCG3"Me while EGCG3"Me was not detected in black tea (fermented tea) manufactured from Benihomare and Benifuji. Thus, the O-methylated catechin derivatives, such as (-)- epigallocatechin-3-O-(3-O-methyl) gallate (EGCG3"Me) from the tea leaves of Benihomare cultivar necessarily are from the green unfermented tea as the black tea manufactured from Benihomare does not contain O-methylated catechins.

41. Zeyuan et al. teaches that the constituents of green tea extracts comprising catechins reduce blood triglyceride levels and therefore at the time of the invention it



would have been obvious to one ordinarily skilled in the art that the O-methylated catechins, such as EGCG3"Me isolated in the green tea extracts of Suzuki et al. from Benihomare cultivar, Benifuji cultivar, etc. are necessarily included in the tea extracts/functional beverages for the method of reducing blood triglyceride levels of Zeyuan et al. as Animal Cell Technology: basic & applied aspects: proceedings of the Thirteenth Annual Meeting of the Japanese Association for Animal Cell Technology (JAACT) teaches that Benihomare, Benifuuki and Benifuji contained as much as 1% of EGCG3"Me in their green teas.

42. Also, Suzuki et al. and Zeyuan et al. have identical extraction processes for the green tea extracts/functional beverages and therefore it would have been obvious to one skilled in the art that the green tea extracts/functional beverage of Zeyuan et al. may comprise O-methylated catechin derivatives as taught by Suzuki et al.

43. Suzuki et al. teaches that EGCG and EGCG3"Me have analogous properties and therefore, it is obvious to those skilled in the art to make known substitutions on compounds that are similar in structure and function to observe the effects on the function of such compounds and to use the observations/data to further manipulate a compound to generate the desired effect, such as reducing blood triglyceride levels.

### ***Conclusion***

No claims are allowed at this time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELISSA PERREIRA whose telephone number is (571)272-1354. The examiner can normally be reached on 7-4 M, 7-4 T, 6 Th, 7-4 F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Hartley can be reached on 571-272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Melissa Perreira/  
Examiner, Art Unit 1618